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IRIS, SECTION APOGON, SUBSECTION OREGONAE  
SUBSECT. NOV.<sup>1</sup>

QUENTIN D. CLARKSON

*Iris tenuis* Wats. is endemic to the upper Clackamas River and its tributary, Eagle Creek, in Clackamas County, northwest Oregon. A single specimen collected in 1884 from Washington County, Oregon, is apparently mislabeled, as the species has not been collected since from that area.

While the specific validity of *I. tenuis* has not been questioned, it has been included by authors in subsection *Californicae* of section *Apogon* only with some reluctance. Foster (1937) called attention to its morphological and cytological distinctions, but left it in the *Californicae*. Simonet (1934) placed the species in the *Sibiricae* mainly on cytological grounds, but Foster rejected this treatment for morphological reasons. Smith and Clarkson (1956) on the basis of cytological data proposed its removal from the *Californicae*.

Simonet reported a chromosome number of  $n=14$  for *I. tenuis*. Smith and Clarkson confirmed this number and also reported that fertile hybrids between other members of the *Californicae* are easily produced, but that hybrids could not be produced between *I. tenuis* and *I. tenax* Dougl. Presumably this barrier extends to other members of the subsection. Morphologically *I. tenuis* differs distinctively from other *Californicae* in having ensiform leaves and scarious instead of green bracts. Superficially, as Foster pointed out, it resembles *I. cristata* Ait., and the general appearance of the species is unlike other *Californicae*.

Inclusion with the *Sibiricae*, as proposed by Simonet, seems unwise not only because of morphological differences but also because of geographical considerations. If *I. tenuis* is placed with the *Sibiricae* it becomes an isolated member of the subsection with little in common except a possible base chromosome number of  $n=7$ .

<sup>1</sup> Grateful acknowledgment is made to Sister John Mary of Marylhurst College for her assistance with the Latin diagnosis and to Dr. Helen Gilkey of Oregon State College for her helpful comments.

Regardless of origin, *I. tenuis* is sufficiently distinct, morphologically, cytologically, and geographically, to warrant erection of a new subsection which is accordingly proposed.

IRIS, sect. APOGON, subsect. **Oregonae**, subsect. nov. Perennes ex rhizomis gracilibus; folia ensiformia, subviridia, basibus scariosis, equitantes; caulis ramosus, 2–3 flores in omni ramo; spathae scariosae, oppositae, unifloriferae; perianthii tubus pedicellusque breves; flores pallide albi aut caeruleo-tincti.

Perennials from slender rhizomes; leaves ensiform, pale green, scarious at base, equitant; stems branched, 2–3 flowers on each branch; spathes scarious, opposite, 1-flowered; perianth tube and pedicel short; flowers pale white or tinged with blue. Type species. *I. tenuis* Wats. Proc. Amer. Acad. XVII: 380. 1882.

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#### REVIEWS

*How to Identify Plants.* By H. D. HARRINGTON. 203 pp., illustrated by L. W. Durrell. Sage Books. 1957. Denver, Colo. \$3.00.

This handy, pocket-sized "how-to-do-it" book, by the author of the Manual of the Plants of Colorado, is designed "to provide practical help for those interested in learning the special technique of identifying plants." It is printed by offset and has numerous, simple line drawings. The more common descriptive terms are grouped into eight chapters, each chapter devoted to a particular category of structure, e.g., flower, stem, leaves. The student is advised to commit these terms to memory, whereas terms less commonly used are included in a 79-page, partly illustrated glossary for reference, at the end of the book. Although the definitions are said to be based on usage in the "average manual," "cell" is eschewed for "locule," and one might wish that the term "pistil" had been avoided also, because it is difficult to homologize with the idea of sporophylls (page 29, fig. 46). A key is offered to the characters of leaf surface, and another to common types of fruit; in the latter the use of both "pistil" and "carpel" seems needlessly confusing. A special chapter on the use of keys, including synoptical, bracket, and indented types, contains useful comments on difficulties likely to be encountered and means of overcoming them. Collecting and preparing specimens are described succinctly; the collector is not told how to retain the association between data and specimens after the latter have been kept "all day" in a vasculum or lard can! A useful feature is a series of five outline maps showing the geographical coverage of the principal manuals and floras of the United States and North America; it is unfortunate, however, that references to three useful floras are omitted from maps I and II—Jepson, W. L. Manual of the flowering plants of California; Kearney, T. H., and R. H. Peebles, Arizona Flora; and Tidestrom, I. Flora of Utah and Nevada.

Judged strictly within its avowed limitations, this small volume should prove a useful teaching aid in both field and laboratory.—LINCOLN CONSTANCE.